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(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC-E			1 - 31 March 1959

ACTION: FUTURE | X ACTIVE | COMPLETED | CANCELLED | SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5010	I	EES	25X1A9A

PROJECT TITLE

Receiving Antenna Multicoupler

PROJECT REQUIREMENT

To provide for OC requirements the best possible receiving antenna multicoupler.

PROJECT DESCRIPTION

To monitor the commercial and military developments in the field to determine if any of these multicouplers provided sufficient improvement to warrant replacing those now used in OC requirements.

APPROVAL DATE	APPROVED BY	STARTING DATE	COMPLETION DATE
1 March 1956	WAB / JJK	1 June 1956	

REMARKS

During this reporting period, the NSA tests of the Westinghouse KM-1 multicoupler were received. These results substantiated all earlier findings in regard to performance.

In view of all test results at hand concerning the performance of this unit, it has been decided to standardize on the KM-1. A memorandum has been drafted and sent to OC-T, OC-SP, OC-P, and OC-S for their coordination.

Procurement will be initiated during the next reporting period provided all staffs agree that this unit should be adopted as standard.

FORM 10-58 1543

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(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC-E			1 March - 31 March 1959

ACTION

FUTURE	X ACTIVE	COMPLETED	CANCELLED	SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5020	I	FES	

25X1A9A

PROJECT TITLE

Modification Work Orders

PROJECT REQUIREMENT

To notify all field stations of standard modifications to equipment.

PROJECT DESCRIPTION

Reproduce necessary copies, assemble and prepare cover letters for all Modification Work Orders. Obtain approval and coordination. Determine category of distribution and forward to appropriate areas.

APPROVAL DATE	APPROVED BY	STARTING DATE	COMPLETION DATE
	AJW /s/ JJK /s/	8 February 55	

REMARKS

MWO #28 - "Replacement of Time Delay Relay K-4 in RT-4 Transmitter." Distribution completed.

MWO #27 - "Modification of Tiny Tot Model "B" When Switching from "TD" to "KBD" Operation." Distribution completed.

MWO #29 - "Converting Model "B" Tiny Tot to Model "C" Mark III to Decrease Radiation and Increase Traffic Capacity." This MWO is in the final typing stage.

MWO #30 - "Modification of Tuning Units TU-55 and TU-56 for Improving the Performance of the HT-4 Transmitter when operating within the 18-30 mc. Extended Frequency Range." This MWO is in the final typing stage.

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-E/OC-O+T		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5021	II	EES	[redacted]

25X1A9A

PROJECT TITLE

DF Development and Replacement Program

PROJECT REQUIREMENT

To provide standard DF equipments of the following types to meet Agency requirements: (a) Semi-Fixed HF, DF. (b) Portable HF, DF. (c) Portable VHF, DF. (d) Close range, body type HF, DF.

PROJECT DESCRIPTION

Investigate military,FCC, and commercial developments in the field of DF. Compile a report on the latest development, including cost, availability and specification and recommend equipments for standardization. Should the investigation be unfruitful, prepare specifications for the development and manufacture of equipments to meet Communications requirements.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
March 1957	/WAB/ /JJK/	March 1957	

25X1

During this reporting period, contacts were established with NSA and their approval was granted for a visit to Vint Hill, Va. for the purpose of viewing the new [redacted] installation. It is expected that this installation will be completed during the next month, with the trip planned as soon as the unitsis operational.

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(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC-E			1 March - 31 March 1959

ACTION

FUTURE		ACTIVE	X	COMPLETED		CANCELLED		SUSPENDED	

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5037	II	FES	

25X1A9A

PROJECT TITLE

Technical Bulletins

PROJECT REQUIREMENT

To keep the field supplied with current technical information pertinent to general operation.

PROJECT DESCRIPTION

Scan technical literature to determine and select items for field distribution, determine distribution category, reproduce required number of copies, prepare cover letter, arrange approval and coordination, and forward to appropriate areas.

APPROVAL DATE	APPROVED BY	STARTING DATE	COMPLETION DATE
	AJW /s/ JJK /s/	2 February '56	

REMARKS

TB #24 - FHB #90-1007-1, "Impedance Matching with a Trolley Meter," This bulletin was sent to reproduction and will be issued next month.

TB #25 - FHB #90-1003-1, "Performance and Design of Sloping Vee Antenna," Distribution to the Field completed. 20 additional copies have been requested from reproduction to satisfy Headquarters' requirements.

TB #27 - FHB #90-1004-1, "Extending Electron Tube Life w/Tube Shields," Distribution is being delayed until tube shield catalogs are received for issue as a supplement to this bulletin.

TB #28 - FHB #90-1005-1, "Field Alignment of Collins 51-J Receiver using 100 kc. Oscillator as a Signal Generator," Distribution to the Field completed.

TB #29 - FHB #90-1006-1, "Teflon Safety Precautions," Distribution completed.

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(20-42)

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MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY, AMOUNT	REPORTING PERIOD
		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5053	I	RES	

25X1A9A

PROJECT TITLE

URT-11 Power Supply Arcing

PROJECT REQUIREMENT

The filament winding of a high voltage transformer and the filter choke are arcing at the feed-through bushings. This project is to determine the cause of and corrective measures for this problem.

PROJECT DESCRIPTION

Preliminary investigation has indicated this arcing-over is not caused by insufficient voltage ratings of the components. It may be caused by a resonance. The problem will be turned over to a consulting firm for investigation and recommendations. Corrective measures for eliminating this problem will be distributed as a Modification Work Order.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
15 September 1955	WAB /s/ JJK /s/	20 September 1955	

A satisfactory modification has been devised whereby the transient voltage has been reduced to a value which does not exceed the normal A.C. peak voltage (measured from the high voltage terminal to grounded center top) of the HV power transformer. This is well within the rating of the power supply components.

This modification consists of swamping resistors placed across the secondary of the high-voltage transformer in such a manner that when the DC supply begins to supply current a normally closed relay opens and removes the resistors from across the transformer secondary. During the next reporting period a transmitter will be modified and submitted to a life test. A modification work order will be prepared.

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(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC-P			1 - 31 March 1959

ACTION

STATUS	ACTIVE	COMPLETED	CANCELLED	SUSPENDED
	X			

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5060	I	SDS	

25X1A9A

PROJECT TITLE

Strategic Reserve Program

PROJECT REQUIREMENT

To provide readily available transportable type package radio stations at convenient locations throughout the world for immediate installation and operational use in the event of an emergency.

PROJECT DESCRIPTION

To provide bills of materials for 2, 5, 10, 13, 15, and 20 position transportable type package radio stations with suggested floor plan layouts and standard wiring diagrams to provide efficient equipment utilization.

ORIGINAL DATE	APPROVED BY	STARTING DATE	COMPLETION DATE
Sept. 53	WAB /s/ JJK /s/	September 53	

REMARKS

Various discrepancies in the Bills of Materials for the 5, 10, 15, and 20 Position Transportable Stations have been discovered in the present revision of the stockpile. These discrepancies consist of items currently classed as limited standard and substitutions have been recommended.

FORM 1543

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(20-42)

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MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-S		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5071	I	SDS	[redacted] 25X1A9A

PROJECT TITLE

Tiny-Tot Electro-Magnetic Radiation Reduction

PROJECT REQUIREMENT

Reduction of the radio-magnetic radiation to a maximum of 3 feet.

PROJECT DESCRIPTION

The present Tiny-Tot has detectable compromising electro-magnetic radiation up to 15 feet from the unit. Determine the radiation reduction by: shielding the magnets; reductions of magnet current; use of dummy magnets wired in opposition to the normal field; and use of external masking elector-magnetic field. Radiation recordings to be made on an oscilliscope for comparative reduction by individual and combinations of methods.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
29 October 1956	/WAB/ /JJK/	29 October 1956	

The rough draft of MWO No. 29 which covers modifications required to provide radiation suppression on Tiny Tots was completed and edited during this reporting period. Copies for distribution to the field are expected to be ready during May. The modification kits which have been ordered from 25X1A5A1 [redacted] **will be available about 15 May.**

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MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-E		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5085	I	SDS	

PROJECT TITLE

Communications Systems Planning for New Headquarters Building

PROJECT REQUIREMENT

To determine the types of Communications systems, and thequantities of equipment that will be required for installation in the new Headquarters Building to meet Agency communications requirements.

PROJECT DESCRIPTION

To investigate and compile information on new communications systems and equipment. To meet regularly with representatives of the Message Center Staff, Operations, Engineering, and Security Divisions, and the OC member of the New Building Planning Staff to discuss communications requirements for the new building. To prepare a list of the equipment that will be required and suggested floor plans and equipment layouts defining spare requirements.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
January 1957	WAB /s/ JJK /s/	January 1957	

During this reporting period copies of revised drawings of the signal center area in the new building were obtained from the New Building Planning Staff.

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25X1A

MONTHLY PROJECT REPORT

[redacted] OC-4&T	Budget Estimate Amount	Reporting Period: 1 - 31 March 1959

☒ Active ☐ Completed ☐ Cancelled ☐ Suspended

Project Number	Priority Class	Prim. Rspn.	Project Engineer
3-[redacted]	I	RES	[redacted] 25X1A9A

Project Title

Selective Calling Systems

Project Requirement

To determine what type, if any, selective calling system can be adapted for use in our overseas installations in order that stations may be alerted during unattended watch periods of emergency situations.

Project Description

To investigate and compile a listing of all types of selective calling systems with such information as purpose, operational, technical and physical characteristics, and cost.

To select by operational and technical evaluations, if necessary, and recommend one of these systems be adopted.

If approved, to implement procurement and installation.

Original Date	Approved	Starting Date	Completion Date
December 1958	WAB /s/ WJK /s/	January 1957	

During this reporting period, the scope of the selective calling project has been thoroughly discussed with OC-T. These discussions led to a re-evaluation of the requirement for selective calling. Hence, OC-T is preparing a memorandum setting forth the most recent requirements, including size, emission, and urgency.

At the same time, action has been initiated to collect all available data on the RMCA selective calling system and to investigate the possibility of development of a small, battery operated encoder to work into the RMCA decoder.

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-E/OC-O+T		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5102	I	EES	[redacted]

25X1A9A

PROJECT TITLE

Voice Link for 6-ST

PROJECT REQUIREMENT

Provide a voice link between the transmitter and receiver vans based on suggestions from operation [redacted]. 25X1A2G

PROJECT DESCRIPTION

Design and install in the two 6-ST units currently at the [redacted] **warehouse a voice link capable of providing communication between the transmitter and receiver vans. The link should have the following capabilities:** 25X1A6A

a. **Power output and range approximately the MUX link.**
b. **Be portable or work in conjunction with an extra portable unit.**
c. **Work into the present MUX antenna system or provide a separate antenna system.**

Once the above is accomplished, a modification work order will be published for the rework of the remaining 6-ST's.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
May 1957	/WAB/ /LJK/	May 1957	

Investigation of the audio amplifier and modulator circuitry of the 6 ST VHF MUX system has disclosed the fact that any voice communications utilizing a keyed microphone will require internal changes in order to prevent interference. Briefly, the abrupt change in signal introduced by keying the microphone and by beginning to speak is seen by the modulator as a high frequency component, resulting in interference on the higher VFC channels. To overcome this problem, a low pass interstage filter will be installed between the last audio (voice) amplifier and the modulator.

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(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC-E	58	$5,000	1 - 31 March 1959

ACTION

FUTURE	X ACTIVE	COMPLETED	CANCELLED	SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5105	I	EES	25X1A9A

PROJECT TITLE

HT-4 Exciter Modification

PROJECT REQUIREMENT

Some of the HT-4 transmitters do not have sufficient output from the exciter between 18 and 30 megacycles to drive the power amplifier to full output.

PROJECT DESCRIPTION

The exciter circuitry will be investigated to find methods of increasing its output in the 18 to 30 megacycle range. Any changes necessary will be kept as simple as possible. An outside consulting firm may be called in on this problem if additional help is needed. When the exciter drive is increased to the proper level, modification kits will be made up to be used in conjunction with Modification Work Order NO. 7 (Revised).

APPROVAL DATE	APPROVED BY	STARTING DATE	COMPLETION DATE
August 1957	AJW / JJK	August 1957	

REMARKS

The Modification Work Order was tested by having it performed by an inexperienced technician and found to be satisfactory. It will be published as MWO NO. 30, optional.

Fifty modification kits have been requisitioned and will be placed in stock.

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MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-E		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5115	I	EES	

25X1A9A

PROJECT TITLE
Standardization of VHF fixed, Mobile/AC Utility, Portable and Body Concealable Transmitter-Receiver Equipment in the Frequency Bands of 25-54 mcs and ~~144-174~~ mcs

PROJECT REQUIREMENT Agency communication requirements necessitates the selection of equipments of the highest efficiency and flexibility for standardization. This is due to the recent acknowledgement by the Office of Communications of its responsibility for providing communications system in support of surveillance activities, plus the other Agency requirements.

PROJECT DESCRIPTION

To determine by evaluation and comparison the best of a number of commercially available VHF Fixed, Mobile/AC Utility, Portable and Body Concealable Transmitter-Receiver Equipments. Suitable units will be selected and recommended for standardization. In the event suitable equipments are not available a program for the modification of existing equipments and/or a R + D program will be initiated.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
March 1958	GBG KAA	March 1958	

Fixed:

Information has been requested from Lenkurt, RCA, Radio Engineering Laboratory, Motorola, and General Electric concerning VHF power amplifiers capable of up to 330 watts output and compatible with our present Mobile/A.C. Utility equipment.

The information thus obtained will provide a basis for further investigation and possible procurement for evaluation.

Next 1 Page(s) In Document Exempt

Approved For Release 2002/08/26 : CIA-RDP78-02820A000500020092-3

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MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-E		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5120	I	EES	

25X1A9A

PROJECT TITLE

Review of Present Converter field and Evaluation of Diversity Reception Systems

PROJECT REQUIREMENT

Review what is currently on the market to determine if there is an economically suitable replacement for the Northern 107 Model 2 Frequency Shift Converter. To determine the advantages or disadvantages of space/frequency diversity reception systems for possible Agency application.

PROJECT DESCRIPTION

Prepare a comparison chart of all Frequency Shift Conterters currently being produced, such as the Westrex 50-B, TMC CFA, Hoffman CV-116, Northern 107 and 174, etc., to determine which is the most suitable unit to meet our requirements. To evaluate each converter in a diversity system.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
January 1958	/AW/ /JJK/	February 1958	

Evaluation of the CV-116 was completed, and a report is forth coming. This convertor is to be utilized next in the investigation of high speed RTTY under Project NO. 5139.

Since the Westrex Model 50-B cannot be delivered before 3 April 1959, the contractor has been instructed to perform environmental heat tests on the three AF shift convertors, i.e. TMC Model CFA and Northern Models 107 and 174.

SECRET

(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
L/CO			1 - 31 March 1959

ACTION

FUTURE	ACTIVE	COMPLETED	CANCELLED	SUSPENDED
	X			

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
-5121	I	EES	[redacted] 25X1A9A

PROJECT TITLE

KY-1 Voice Operated Relay

PROJECT REQUIREMENT

Investigate the feasibility of installing a voice operated relay in the KY-1.

PROJECT DESCRIPTION

A voice operated relay will be fabricated at the R + D Lab and will be given an evaluation on a KY-1 link between the office of the [redacted] 25X1A

APPROVAL DATE	APPROVED BY		STARTING DATE	COMPLETION DATE
January 1959	CBG /JJK-	[redacted] 25X1A9A	January 1959	

REMARKS

The NSA engineers have not completed the investigation of the inherent time delay experienced between the time the push to talk button is depressed and the time the KY-1 system is ready to pass traffic. Their recommendations should be forthcoming in the near future.

A transistorized VOR has been assembled by the R+D Lab which appears to fit into the KY-1 system quite well. Most of the circuitry used has been proven in other equipment developed by the R+D Lab so that very little additional development work should be required.

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-O+T		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PRO
E-5123	I	SDS	[redacted] (EES) (SDS) 25X1A9A

PROJECT TITLE

25X1C4A Antenna Systems for [redacted] Communications Nets.

PROJECT REQUIREMENT To provide an antenna system, with the receiving antenna(s) being capable of joint use by other offices, for communications nets installed in 25X1C4A [redacted] buildings. The antenna installation should perform efficiently and yet not detract from the esthetic appearance of the building.

PROJECT DESCRIPTION

To investigate and test various types of multicouplers, vertical antennas with associated tuning networks, both remotely operated and passive, and to determine the type multicoupler and antennas best suited to meet the applicable requirements.

25X1A9A APPROVAL DATE	APPROVE [redacted]	STARTING DATE	COMPLETION DATE
April 1958		April 1958	

The Collins 180V-2 remotely tuned antenna coupler is expected to arrive during the next reporting period.

The antenna coupler will be tested and evaluated using a standard transmitting antenna and transmitter.

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-SP/EA		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5126	I	SDS	25X1A9A

PROJECT TITLE

25X1A2D1 [ ] SPD Monitoring Station [ ] 25X1A6A

PROJECT REQUIREMENT

To provide engineering support for Project [ ] 25X1A2D1

PROJECT DESCRIPTION

Support required will consist of detailed systems engineering design for various communications facilities as requested by the cognizant divisions and the preparation of cost estimates, bills of materials and all necessary installation drawings.

25X1A9A

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
April 1958	[ ]	April 1958	

Procurement action for a 200 KW General Motors twin diesel motor generator and accessories was initiated. This provides a 3rd generator set at the site and is to be used for stand-by operation. The request was made by OC-SP. The field was notified.

A dispatch was originated revising the ordering information for 200 KW twin generators. Specifically, parts ordered for 60 cps generator units will use No. 12205 while parts for 50 cps units will order under No. 12203.

High lift pumps with belt sets were ordered for delivery to the field for use with the two 200 KW units now in operation. The third unit under procurement includes this pump.

Information was sent to the field stating that the presently installed switchboard can be modified for providing tie-in for the third generator as stand-by, but will not accommodate distribution of 600 KW. If the total load reaches 600 KW a new switchboard will be required.

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. 59 AMOUNT 20,000	REPORTING PERIOD
OC-E		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5131	I	EES	[redacted] 25X1A9A

PROJECT TITLE

Modification of RS-1

PROJECT REQUIREMENT

Complaints were received from the field concerning failures of the power cables, crystal sockets, and waterproofing of the RS-1, reference [redacted] 57-1738, 25X1A
25X1A [redacted] 57-1042.

PROJECT DESCRIPTION

The newly designed power cable will be life tested to assure that it will sustain the operational stresses. A new crystal socket, which has been previously life tested, will be installed. A new pliobond seal will be used to increase the effectiveness of the waterproofing. An RS-1 will be removed from stock and the new parts and seal will be used to modify it. This project will culminate in the issue of a modification work order to all concerned areas.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
July 1958	[redacted] 25X1A9A	July 1958	

Delivery of the five modification kits has been delayed until early April. Procedures for the modification have been agreed upon.

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(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC-E			1 - 31 March 1959

ACTION: FUTURE | X | ACTIVE | | COMPLETED | | CANCELLED | | SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5132	I	SDS	[redacted] 25X1A9A

PROJECT TITLE

Operating Positions for New Agent Transmission Systems

PROJECT REQUIREMENT

Incorporate necessary components into base station operating positions.

PROJECT DESCRIPTION

Design base station operating positions that will include equipment that will be needed to receive and translate high speed and/or other new forms of agent communication signals.

APPROVAL DATE	APPROV	STARTING DATE	COMPLETION DATE
25X1A9A February 1959	GBC JJ[redacted]	February 1959	

REMARKS

25X1A6A The modified M90 [redacted] was inspected at the [redacted] plant. A trip report is attached. 25X1A6A

A receiving position, consisting of tape transport, convertor and monitor scope is being designed into an "AMCO" type rack.

FORM 10-58 1543

(20-42)

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(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC-O+T 58-766			1 - 31 March 1959

ACTION

FUTURE	ACTIVE	COMPLETED	CANCELLED	SUSPENDED
	X			

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5135	I	EES	

25X1A9A

PROJECT TITLE

Modernization of CP-4 Control Panel

PROJECT REQUIREMENT

Redesign the CP-4 Control Panel and fabricate 100 units.

PROJECT DESCRIPTION

Redesign the CP-4 control panel as a more efficient unit and rebuild from the start, using miniaturization techniques wherever possible and practical, incorporating features in the equipment from experience gained from previous models of the control panel.

APPROVAL DATE	APPROVED BY	STARTING DATE	COMPLETION DATE
July 1958	/s/ GBC /s/ JJK	July 1958	

REMARKS

The engineering model of the CP-5 Control Panel has been inspected by the Operational Requirements Section of OC-T. At their request the following specifications have been incorporated .

A) A power transformer capable of operating from either 110 or 220 volt 50/60 cycle power mains.

B) Line fuse mounted on the front panel.

C) Auxiliary A.C. receptacle mounted on rear panel (fused).

In addition, a mounting panel will be designed to facilitate rack mounting.

The CP-5 is packaged in the form of a book measuring 7¼" wide X 5½" deep X 3" high. Control panel labeling and rubber mounting feet can be readily re-arranged to facilitate either horizontal or vertical mounting.

Electrical and mechanical drawings have been completed. Necessary arrangements will now be made to initiate the fabrication of the CP-5 Control Panel.

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MONTHLY PROJECT REPORT

OC-8			1 - 31 March 1959
	X		SUSPENDED
E-5136	1	EES	PROJECT ENGINEER [redacted] 25X1A9A

Maximum Cryptographic Part Alarm (MACPAL)

Provide an alarm for the TSEC/KL-7 which will notify the operator when a pre-determined number of groups have been typed.

The MACPAL should be an incandescent lamp which will light at 90 groups or 335 groups and which will continue to burn until the counter is re-set.

July 1958	/OBP/ /J.R./	July 1958

Specifications and drawings of the AL-1 were sent to one manufacturer. They will fabricate the five units at a cost of $510 each. This price is considerably more than what was expected.

The specifications and drawings have been sent to another manufacturer for another bid.

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY, AMOUNT	REPORTING PERIOD
OC-E		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5137	I	EES	25X1A9A

PROJECT TITLE

Coaxial Output Network for the 231-D Transmitter

PROJECT REQUIREMENT

A coaxial output network, independent of the existing unbalanced output is required for the 231-D Transmitter.

PROJECT DESCRIPTION

The output circuit of the 231-D Transmitter will be investigated and a suitable network, with provisions for metering, will be designed and fabricated to accommodate coaxial fittings. The existing outputs (i.e., unbalanced and balanced 600 ohm line feed) of this transmitter will not be affected. A modification kit with instructions will be drawn up.

25X1A9A

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
6 July 1958		July 1958	

During the reporting period, a set of pilot drawings has been completed for fabrication of a coaxial output network. A parts list has also been completed. A contract for fabrication will be let in the near future.

The writing of the Modification Work Order has been delayed until one kit is complete. This kit will be installed and accepted prior to delivery of the other units, and the MWO will be written at that time.

(When Filled In)

MONTHLY PROJECT REPORT

	BUDGET EST.		REPORTING PERIOD
CSD 8-517	FY	AMOUNT	1 - 31 March 1959

ACTION

X ACTIVE	COMPLETED	CANCELLED	SUSPENDED

	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
8-5138	I	EES	25X1A9A

Teletype Clear Text Alarm

A device is required which will detect the clear text word "CITR" when transmitted to a signal line. Upon detecting this word the device will provide a disabling circuit for the transmitter-distributor and an audible and/or visual alarm shall be given.

All signal lines are monitored by modal-14 reperforators. Contact assemblies are available that are operated by the pull bars on the M-14. These contacts can be added so that they are operated by the space, C, I, T, and R pull bars. These contacts can be used to control the Clear Text Alarm device. The Clear Text Alarm device will be either relay or diode operated and contain its own power supply.

	APPROVED BY	STARTING DATE	COMPLETION DATE
August 1958	/WAB/ /JJK/	August 1958	

Two SSZ-5 electronic monitors have been requisitioned on extended loan basis from the Air Force. Tentative delivery is scheduled in April.

The Air Force SSZ-5 line monitor shows considerable promise so no further development work will be done until the SSZ-5 is thoroughly tested and evaluated.

SECRET

(20-42)

~~SECRET~~ ~~CONFIDENTIAL~~

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	
E-5139			25X1A9A

PROJECT TITLE

Investigation of Possibility of Increasing the Speed of Teletype Staff Communications

PROJECT REQUIREMENT

To determine the maximum reliable transmission speed of Agency teletype staff circuits, when using conventional FSK techniques.

PROJECT DESCRIPTION

Engineer a high speed radio teletype communication system and, evaluate the operation of this system at speeds up to 300 wpm over an ionospheric path. Conventional FSK techniques are to be employed except that the shift may be optimized for the speed actually transmitted. All equipments employed are to be commercially available items, however, modifications to the equipments are permitted. If possible, terminal equipments are to be selected which will operate at speeds in excess of 300 wpm. The system should be compatible with existing facilities to the extent that no major changes in radio transmitting and receiving equipment will be required.

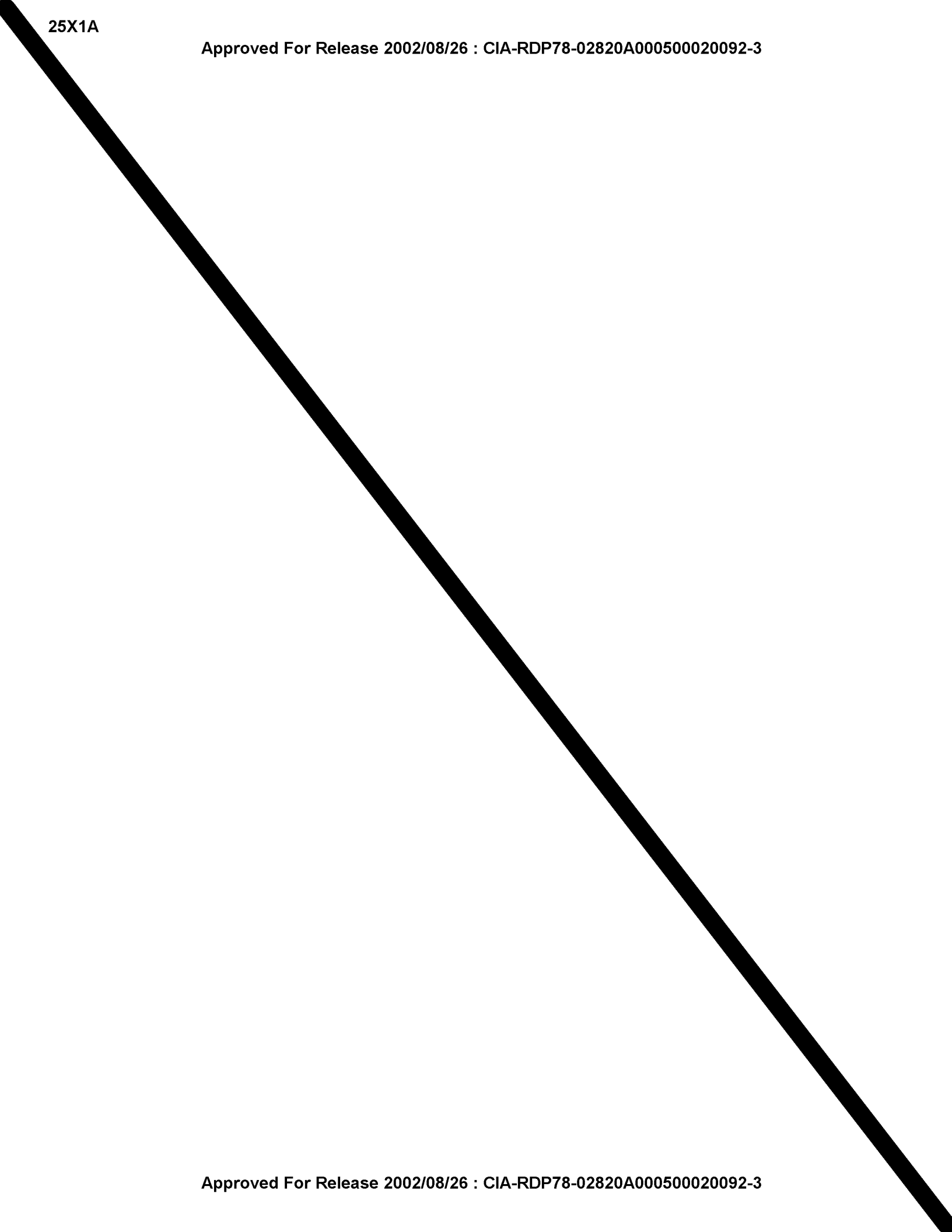
APPROVAL DATE	APPROVED		STARTING DATE	COMPLETION DATE
25X1A9A December 1958				

Evaluation of the CV-116 was completed and this equipment is now available for testing as a component in high-speed RTTY systems.

A visit was made to the Washington office of the [redacted] 25X1A5A1
25X1A5A1 **to observe the** [redacted] **High-Speed (600 wpm) tape system in operation. Arrangements were made to obtain one complete system on a lean basis, and to perform such modifications as may be necessary to enable operation on speeds of 180, 240, and 300 words per minute.**

OC-T has been requested to provide transmission studies for paths
25X1A6A **between Washington-** [redacted] **and Washington-** [redacted] **to enable further** 25X1A6A
planning toward this investigation.

~~CONFIDENTIAL~~ ~~SECRET~~



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MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY, AMOUNT	REPORTING PERIOD
OC-O&T 58-807		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	
E-5141	I	EES	[redacted]

25X1A9A

PROJECT TITLE

Device to Produce MIMIC Capabilities

PROJECT REQUIREMENT

Provide 15 MIMIC Units capable of determining when there is modulation present on the received signal and reproduce this modulation for rebroadcast. It should also be able to determine if the unmodulated carrier is present, which should control the carrier of the MIMIC transmitter.

PROJECT DESCRIPTION

Design and construct a prototype MIMIC Unit and make up manufacturing specifications and drawings. Test and evaluate prototype unit and obtain approval for the manufacture of production units. Distribute specifications and drawings for bids for a quantity of production units to fill OC requirements.

25X1A9A

APPROVAL DATE	APPROVED	RTING DATE	COMPLETION DATE
AUGUST 1958	[redacted]	AUGUST 1958	

All components are being assembled by the contractor. Construction of the unit will begin in the near future.

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY, AMOUNT	REPORTING PERIOD
OC E		1 - 31 March 1959

☐ FUTURE ☐ ACTIVE ☒ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PROJECT ENGINEER
E-5143	I	SDS	25X1A9A

PROJECT TITLE

25X1X7 [redacted] Communication Network [redacted] 25X1A2D1

PROJECT REQUIREMENT

To design a communications network for the [redacted] 25X1X7

PROJECT DESCRIPTION

To provide engineering services involving the selection of the necessary equipment and the preparation of a bill of materials, wiring diagrams, and suggested floor plan layouts to accomodate the installation of the following:

[redacted]) to 25X1A6A

2. Emergency radiotelephone facilities for each station capable of supporting lateral communications to all other stations in the network.

3. A radio direction-finding equipped vehicle to operate in conjunction with four, presently inactive, fixed direction-finding stations.

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
September 1958	GBG /s/ KAA /s/		March 1959

Informal discussions with representatives of OC-MD and NEA indicated that further requests for engineering assistance are not contemplated in the near future. This project, therefore, is considered as completed and will not be reported on further.

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY, AMOUNT	REPORTING PERIOD
		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIN. ENGR.	PROJECT ENGINEER
E-5144	I	[redacted]	[redacted] 25X1A9A

PROJECT TITLE

OC-SP Dual Electronic Power Supply

PROJECT REQUIREMENT

To fill a requirement for SP for a 400 cycle 500 volt-amp. and 28 VDC 10 amp. dual electronic power supply.

PROJECT DESCRIPTION

To prepare specifications which will fulfill SP's requirements for 10 each portable dual electronic power supplies. To examine the proposals received to determine which is best suited, taking into consideration weight, size, efficiency, delivery time, and method of operation. To monitor the fabrication of the production units. To conduct tests on the pre-production model to insure that it meets all specifications.

APPROVAL DATE	APPROVED [redacted] 25X1A9A	STARTING DATE	COMPLETION DATE

During this reporting period, the contractor has completed the engineering model and is beginning an evaluation of the circuitry. Upon satisfactory completion of this evaluation, the contractor will begin fabrication of the initial unit, eventually earmarked for Agency evaluation prior to acceptance of the entire order.

[redacted]

(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC-E			1 - 31 March 1959

ACTION

FUTURE	ACTIVE	COMPLETED	CANCELLED	SUSPENDED
	x			✓

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5172	I	SDS	[redacted] 25X1A9A

PROJECT TITLE

AS-6 Base Station Systems Design

PROJECT REQUIREMENT

To design the base station antenna system and AS-6 equipment installation.

PROJECT DESCRIPTION

The project will include the antenna design, equipment layout, installation drawings and preparation of a bill of materials to incorporate the AS-6 system into existing base stations.

APPROVAL DATE	APPROVED BY	STARTING DATE	COMPLETION DATE
February 1959	JJK GE [redacted]	February 1959	25X1A9A

REMARKS

Preliminary engineering investigation has indicated [redacted] to be a much more adaptable site than [redacted] for the base station location. 25X1A6B 25X1A6B Antenna design work has been initiated and upon notification of a definate decision regarding the site selected, antenna plot plans and installation drawings will be prepared. Based on the engineering design the necessary test equipment and installation materials will be selected. This information will be forwarded to MEB for processing.

Next 1 Page(s) In Document Exempt

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(When Filled In)

MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY	BUDGET EST. AMOUNT	REPORTING PERIOD
OC 8095			1 - 31 March 1959

ACTION

FUTURE	X ACTIVE	COMPLETED	CANCELLED	SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RESPONSIBILITY	PROJECT ENGINEER
E-5197	I	SDS	[redacted] 25X1A9A

PROJECT TITLE

Portable Emergency Broadcast Station

PROJECT REQUIREMENT

To provide packages medium and shortwave 1 kilowatt broadcast stations for field use.

PROJECT DESCRIPTION

1. Find a suitable 1 KW broadcast transmitter for the 535/1605 KC band.

2. Find a suitable 1 KW broadcast transmitter for the 2-26.1 MC band.

3. Find antennas useable in the 550/1600 KC band and supporting towers for dipoles in the 2-30 MC band.

4. Determine materials and accessories necessary for installation and operation of a complete broadcast station. and requisition these items.

5. Install and field test the stations [redacted] 25X1A

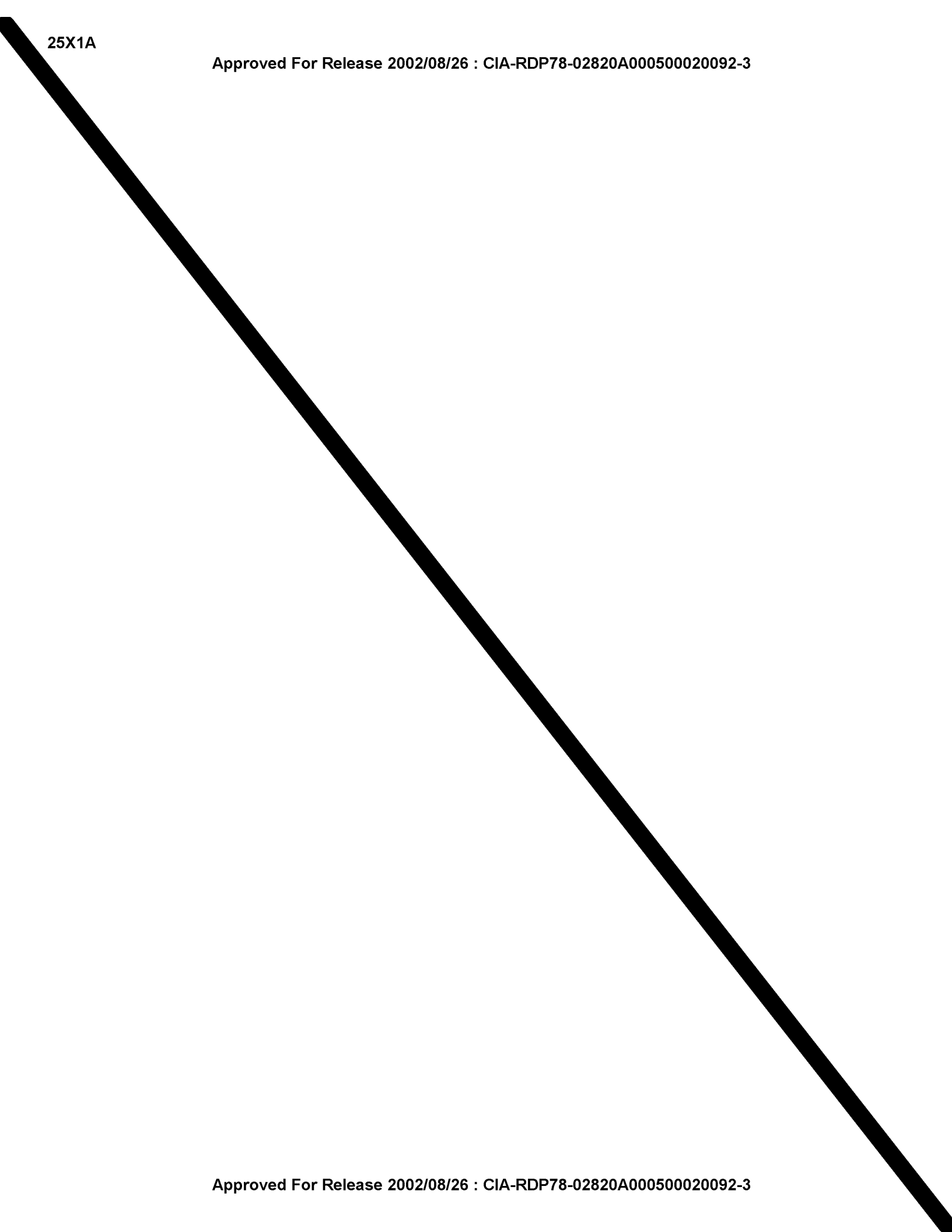
APPROVAL DATE	APPROVED BY	TION DATE
January 1959	[redacted] 25X1	January 1959

REMARKS

Our specifications on the medium and high frequency transmitters and antenna tuner were forwarded by OL to various contractors for bids. Bids are due on 17 April.

The use of "Butler" type portable shelters was investigated. These seem to be practical for use as a combination studio/transmitter room.

FORM 10-58 1543



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MONTHLY PROJECT REPORT

ORIGINATOR(S)	BUDGET EST. FY. AMOUNT	REPORTING PERIOD
OC-O+T		1 - 31 March 1959

☐ FUTURE ☒ ACTIVE ☐ COMPLETED ☐ CANCELLED ☐ SUSPENDED

PROJECT NUMBER	PRIORITY CLASS	PRIM. RSPN.	PR
E-5412	I	SDS	

25X1A9A

PROJECT TITLE

One Man Radio Station

PROJECT REQUIREMENT

Design a complete one man radio station to be used as a standard for the planning of all new one man stations or when renovating existing stations.

PROJECT DESCRIPTION

This project was originally started in September 1956 to prepare a bill of materials and associated drawings to cover the installation of a one man radio station in [redacted] It has been expanded to cover the installation and renovation of all one man stations. Using the one man station design as a guide, a complete bill of materials, associated drawings and installation specifications will be prepared according to the requirements of each particular station.

25X1A6A

APPROVAL DATE	APPROVED	STARTING DATE	COMPLETION DATE
September 1956	AJW /s/ JJK /s/	September 1956	

The prototype One-Position Station was received during this reporting period and assembled in Room 2050, Alcott Hall. It is planned to demonstrate the unit to the various OC Operations Divisions and receive their comments before writing final specifications.